



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,760	06/27/2003	Marc Andre Boillot	CE10967JI016 Boillot, Mar	7406
24273	7590	10/05/2009	EXAMINER	
MOTOROLA, INC 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			WOZNIAK, JAMES S	
			ART UNIT	PAPER NUMBER
			2626	
			NOTIFICATION DATE	DELIVERY MODE
			10/05/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/607,760
Filing Date: June 27, 2003
Appellant(s): BOILLOT ET AL.

Mr. Pablo Meles
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/14/2009 appealing from the Office action mailed 5/27/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is substantially correct. In addition to the claim status identified by the appellants, Claims 17-22 are additionally rejection under 35 U.S.C. 112, second paragraph for omitting essential steps (*see Office Action from 5/27/2008, Page 5, Item 7*).

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

A substantially correct copy of appealed claims 1-22 appears on pages 1-4 of the Appendix to the appellant's brief. The minor errors are as follows: although the claims are identical to those in the most recent amendment filed on 2/26/2008, the claims still feature their status identifiers and limitations added in the amendment from 2/26/2008 are still underlined. These identifiers and underlines should be disregarded for purposes of appeal, as there is no amendment submitted concurrently with the present Appeal Brief and the noted amendments in the appendix were from the response filed on 2/26/2008 (*i.e., the claims from the response from 2/26/2008 have simply been copied into the present appendix, complete with identifiers*)..

(8) Evidence Relied Upon

5,717,818	NEJIME et al	2-1998
5,717,823	KLEJIN	2-1998
6,278,387	RAYSKIY	8-2001
2004/0179676	OKUDA et al	9-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the term “program storage device” is not defined in the specification, thus raising an issue of new matter. Although the specification describes the storage of computer programs on a “computer readable medium”, the term “program storage device” is not used to define these mediums. Also, the term “tangibly embodied” is not defined in the specification. Although computer readable mediums are defined in the specification that can be considered to have program instructions “tangibly embodied” thereupon, such a term is not used to describe encoding a program upon a computer readable medium. Since the only tangible medium disclosed by the specification is a “floppy disk” (*Page 8*), the examiner recommends amending claim 17 to state –A floppy disk containing programming instructions-- to overcome this new matter rejection.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2626

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements in claims 1 and 10 are: an element that enables another party to selecting a rate variable. An audio loopback path cannot control this rate on its own. The remaining dependent claims fail to overcome the aforementioned rejection, and thus, are also rejected under 35 U.S.C. 112, second paragraph.

Claims 17-22 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: a step of another party selecting a rate variable. A rate cannot be adjusted by the variable if it has not first been selected by the user. The remaining dependent claims fail to overcome the aforementioned rejection, and thus, are also rejected under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7, 10-13, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al (*U.S. Patent App. Publication: 2004/0179676*) in view of Nejime et al (*U.S. Patent: 5,717,818*).

With respect to **Claim 1**, Okuda discloses:

An audio input module for receiving audio from a user speaking at an undesired speaking rate (*microphone in a telephone handset of a calling party, Paragraph 0034*);

An audio output module for rendering audio to the user (*loudspeaker in a telephone handset of a calling party, Paragraph 0034*);

An audio loopback path to present audio from the audio input module to the audio output module so as to be heard by the user during the call between the user and another party (*reduced sidetone signal played to a calling party during a telephone conversation, Paragraph 0039 and 0044; and Fig. 3*); and

Wherein the audio loopback path presents audio at a loopback rate depending upon a selectable rate variable to impose an altered talking rate on the user speaking at the undesired speaking rate (*structure for setting a desired voice speed conversion in a loopback path, Paragraphs 0041-0042 and Fig. 3, Element 5, that would include the user's reduced sidetone signal. Since the teachings of Okuda meet the loopback structure required by the claimed invention, it would inherently flow naturally from the teachings of Okuda that a user would be imposed to adjust their conversation speaking rate because they would be hearing their rate-adjusted voice as is also recited in the claimed invention (i.e., claimed intended result that flows from the claimed loopback path with a rate adjustment).*).

Although Okuda teaches the ability to adjust their own voice playback rate, Okuda does not explicitly state that another caller can adjust the speech playback rate. Nejime, however, discloses a speech rate conversion means that may be adjusted by an elderly speaker to slow the speech of another speaker (*rate selector, Col. 13, Lines 7-23 and 59-67*). Nejime further teaches the implementation of such a device in a telephone system (*Fig. 36*). In such a system, a different party (i.e., the elderly individual) can adjust the of speech playback rate of a first caller, which is fed back to that user (*"voice [adjusted by the aged individual] is fed back to the speaker side", Col. 31, Lines 17-22*).

Okuda and Nejime are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda with the first caller feedback taught by Nejime in order to prevent communication difficulties experienced in speaking with an aged person (*Col. 31, Lines 17-22*).

With respect to **Claim 2**, Okuda further discloses:

The audio input module receives speech audio at a given speaking rate and wherein the loopback rate alters the speaking rate in the audio loopback path (*user reduced sidetone is rate-adjusted, Paragraphs 0039-0041; and Fig. 3, Element 5*).

With respect to **Claim 3**, Nejime further discloses that the pitch is not altered in speed rate adjustment (*Abstract*).

With respect to **Claim 4**, Okuda further discloses:

User interface for selectively adjusting the selectable rate variable (*user control unit for setting a voice speed, Paragraph 0034*).

With respect to **Claim 7**, Okuda further discloses:

A memory location to store a rate variable for a given user (*user rate adjust microcomputer that would inherently require some type of storage of a user-selected playback rate in order to process speech samples, Paragraph 0034*).

With respect to **Claim 10**, Okuda discloses:

A first handset for use by a first user (*telephone handset of a calling party, Paragraph 0034*);

A second handset for use by a second user, wherein audio captured from the first user at the first handset is presented to the second user at the second handset through a communication infrastructure (*telephone handset of a called party, 0034-0037; and telephone communication infrastructure, Paragraphs 0035 and 0040; and Fig. 3*);

Wherein the audio captured from the first user at the first handset is also presented to the first user through a loopback path to an earpiece in the first handset during a call between the first handset and the second handset (*reduced sidetone signal played to a telephone calling party, Paragraphs 0039 and 0044*); and

Wherein the loopback path includes a loopback rate for speech audio with a selectable rate variable to impose an altered talking rate on the user speaking at the undesired speaking rate (*structure for setting a desired voice speed conversion in a loopback path, Paragraphs 0041-0042 and Fig. 3, Element 5, that would include the*

Art Unit: 2626

user's reduced sidetone signal. Since the teachings of Okuda meet the loopback structure required by the claimed invention, it would inherently flow naturally from the teachings of Okuda that a user would be imposed to adjust their conversation speaking rate because they would be hearing their rate-adjusted voice as is also recited in the claimed invention (i.e., claimed intended result that flows from the claimed loopback path with a rate adjustment).).

Although Okuda teaches the ability to adjust their own voice playback rate, Okuda does not explicitly state that another caller can adjust the speech playback rate. Nejime, however, discloses a speech rate conversion means that may be adjusted by an elderly speaker to slow the speech of another speaker (*rate selector, Col. 13, Lines 7-23 and 59-67*). Nejime further teaches the implementation of such a device in a telephone system (*Fig. 36*). In such a system, a different party (i.e., the elderly individual) can adjust the of speech playback rate of a first caller, which is fed back to that user (*"voice [adjusted by the aged individual] is fed back to the speaker side", Col. 31, Lines 17-22*).

Okuda and Nejime are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda with the first caller feedback taught by Nejime in order to prevent communication difficulties experienced in speaking with an aged person (*Col. 31, Lines 17-22*).

With respect to **Claim 11**, Okuda further discloses:

User interface for selectively adjusting the selectable rate variable (*user control unit for setting a voice speed, Paragraph 0034*).

With respect to **Claim 12**, Okuda further discloses:

A memory location to store a rate variable for a given user (*user rate adjust microcomputer that would inherently require some type of storage of a user-selected playback rate in order to process speech samples, Paragraph 0034*).

With respect to **Claim 13**, Okuda discloses the second handset as applied to Claim 10 and the user rate adjust microcomputer as applied to Claim 12.

With respect to **Claim 17**, Okuda discloses:

During a call between a user of the communication unit and another party, capturing speech audio from the user of the communication unit in a loopback path between an audio input module and an audio output module, wherein the loopback path presents speech audio received at the audio input module to the audio output module user to hear (*reduced sidetone signal captured and played to a calling party during a telephone conversation, Paragraph 0039 and 0044; and Fig. 3*); and

When the user of the communication unit is speaking at an undesired speaking rate, adjusting the speech audio from the user of the communication unit captured in the loopback path based upon a selectable rate variable to impose an adjusted speaking rate on the user of the communication unit (*setting a desired voice speed conversion in a loopback path, Paragraphs 0041-0042 and Fig. 3, Element 5, that would include the user's reduced sidetone signal. Since the teachings of Okuda meet the loopback required by the claimed invention, it would inherently flow naturally from the teachings of*

Art Unit: 2626

Okuda that a user would be imposed to adjust their conversation speaking rate because they would be hearing their rate-adjusted voice as is also recited in the claimed invention (i.e., claimed intended result that flows from the claimed loopback path with a rate adjustment).)

Okuda further discloses method implementation as a program stored in a microcomputer (*Paragraph 0034*), which would inherently require some type of storage medium for program execution.

Although Okuda teaches the ability to adjust their own voice playback rate, Okuda does not explicitly state that another caller can adjust the speech playback rate. Nejime, however, discloses a speech rate conversion means that may be adjusted by an elderly speaker to slow the speech of another speaker (*rate selector, Col. 13, Lines 7-23 and 59-67*). Nejime further teaches the implementation of such a device in a telephone system (*Fig. 36*). In such a system, a different party (i.e., the elderly individual) can adjust the of speech playback rate of a first caller, which is fed back to that user (*"voice [adjusted by the aged individual] is fed back to the speaker side", Col. 31, Lines 17-22*).

Okuda and Nejime are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda with the first caller feedback taught by Nejime in order to prevent communication difficulties experienced in speaking with an aged person (*Col. 31, Lines 17-22*).

Claim 18 contains subject matter similar to claim 2, and thus, is rejected for the same reasons.

Claim 19 contains subject matter similar to claim 3, and thus, is rejected for the same reasons.

Claim 20 contains subject matter similar to claim 11, and thus, is rejected for the same reasons.

Claims 6 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al in view of Nejime et al and further in view of Rayskiy (*U.S. Patent: 6,278,387*).

With respect to **Claim 6**, Okuda in view of Nejime discloses the telephone loopback path featuring voice speed adjustment, as applied to Claim 3. Although Okuda discloses time-scale modification (Paragraph 0041), Okuda in view of Nejime does not explicitly recite that a SOLA function is utilized. Rayskiy, however, recites:

The audio path presents audio at a rate through a SOLA (Synchronized Overlap and Add) function (*time scaling of an audio signal using SOLA, Col. 6, Lines 5-22*).

Okuda, Nejime, and Rayskiy are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda in view of Nejime with the SOLA function that maintains pitch while performing a speech rate adjustment taught by Rayskiy in order to provide a means for enabling variable playback of audio signals without a depreciation in speech quality (*Rayskiy, abstract*).

Claim 22 contains subject matter similar to claim 6, and thus, is rejected for the same reasons.

Claims 5, 8-9, 14-16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al in view of Nejime et al and further in view of Klejin (*U.S. Patent: 5,717,823*).

With respect to **Claims 5**, Okuda in view of Nejime discloses the means for audio rate adjustment as applied to Claim 3. Okuda in view of Nejime does not specifically suggest receiving audio and a rate variable set from a second audio handset, however Klejin recites receiving, at a first telephone, speech and rate setting information that originates from a different telephone (*Col. 11, Line 45- Col. 12, Line 31*).

Okuda, Nejime, and Klejin are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda in view of Nejime with the speech and rate setting receiving means taught by Klejin in order to achieve device implementation in a practical consumer communication environment (*Klejin, Col. 11, Lines 45-65*).

With respect to **Claim 8**, Klejin further discloses:

The audio output module further comprises a vocoder for detecting a word rate in the audio loopback path using: an energy decision metric, a voicing decision metric, or a tonality measure (*word rate detection in a vocoder using extracted speech parameters*

Art Unit: 2626

indicative of energy and voicing decision metrics, Col. 7, Lines 33-47; and Col. 9, Lines 22-48).

With respect to **Claim 9**, Okuda discloses the rate adjustment storage as applied to Claim 7, while Klejin discloses the means for word rate detection as applied to Claim 8.

With respect to **Claim 14**, Okuda in view of Nejime discloses the means for audio rate adjustment as applied to Claim 10. Okuda in view of Nejime does not specifically suggest receiving audio and a rate variable set from a second audio handset, however Klejin recites receiving, at a first telephone, speech and rate setting information that originates from a different telephone (*Col. 11, Line 45- Col. 12, Line 31*).

Okuda, Nejime, and Klejin are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda in view of Nejime with the speech and rate setting receiving means taught by Klejin in order to achieve device implementation in a practical consumer communication environment (*Klejin, Col. 11, Lines 45-65*).

With respect to **Claim 15**, Klejin further discloses:

The audio output module further comprises a vocoder for detecting a word rate in the audio loopback path using: an energy decision metric, a voicing decision metric, or a tonality measure (*word rate detection in a vocoder using extracted speech parameters indicative of energy and voicing decision metrics, Col. 7, Lines 33-47; and Col. 9, Lines 22-48*).

With respect to **Claim 16**, Okuda discloses the rate adjustment storage as applied to Claim 12, while Klejin discloses the means for word rate detection as applied to Claim 15.

Claim 21 contains subject matter similar to Claim 14, and thus, is rejected for the same reasons.

(10) Response to Argument

Rejection of Claims 17-22 under 35 U.S.C. 112, First Paragraph

After a brief summary of their position (*Appeal Brief, Page 6*), the appellants first turn to the rejection of claims 17-22 under 35 U.S.C. 112, first paragraph directed towards a failure to comply with the written description requirement. The appellants traverse this rejection because they argue that the terms “program storage device” and “tangibly embodied” are well known in the art of computer programming and the specification “clearly conveys to one of ordinary skill in the art that Applicants were in possession of such claimed subject matter” (*Appeal Brief, Page 6*). For this specification-based support the appellants point to Page 8, Lines 8-10, which states that a program is for execution on a computer system (*Appeal Brief, Page 6*). In addition, the appellants rely on Page 8, Lines 14-16 of the specification, which refers to a program that “may be stored on a computer readable medium or other storage medium” and argue that reading such a description, one of ordinary skill in the art would understand that “a program storage device...falls within the scope of a storage medium

Art Unit: 2626

(Appeal Brief, Pages 6-7).

The examiner has considered these arguments and respectfully disagrees. First, in regards to the “tangibly embodying” claim language found in claim 17, not supported in the originally filed specification, and added in the amendment from 7/13/2007, the examiner points out that the portion of the specification that discusses computer program embodiments is found on Page 8. Page 8 provides no description/basis of “tangibly embodying” or what is meant by such terminology. Thus, the meaning of “tangibly embodying” is not provided in the original specification and the scope of mediums that “tangibly” embody a computer program is not described in any way in the originally filed specification. The appellants’ general description of a computer system and stored computer program provide no basis for “tangibly embodying”.

Second, the appellants' specification provides no basis for a “computer storage device”. Although, as was noted by the appellants, the specification does support computer readable mediums storing a program and a storage device might be considered as a computer readable medium, the only mediums described therein are *disk based on transitory carrier wave based (Specification, page 8, Lines 15-16)*. Disk and carrier wave based mediums would not be considered to be a “program storage device” by one of ordinary skill in the art because they are not devices only products of manufacture (*i.e., floppy disk, CD-ROM, DVD, etc*). One of ordinary skill would look to devices such as USB thumb drives, external hard drives, etc as being related to a “program storage device” and the appellants’ specification provides no description of such devices. It is also worth noting that in the appellants’ own description of this

Art Unit: 2626

subject matter in the summary section of the appeal brief (Pages 3-4), the appellants point only to system embodiments in reference to a "program storage device tangibly embodying a set of program instructions" not any type of a program storage device, which adds further evidence that there is a lack written description for this subject matter. Thus, since the appellant does not provide even one example of a "program storage device" in the originally filed specification and provides no scope for what type of storage devices would be encompassed by such terminology, the examiner submits that the rejection of claims 17-22 under 35 U.S.C. 112, first paragraph is proper.

Rejection of Claims 1-16 under 35 U.S.C. 112, Second Paragraph

The appellants next traverse the rejection of claims 1-16 under 35 U.S.C. 112, second paragraph, arguing that claim 1 recites a telephone handset of a calling party in which an audio loopback path on the handset of the calling party plays audio at a loopback rate to the calling party and because the rate is selected by another party to the call no essential matter is omitted here because the control for selecting this rate is located at the communication device operated by the other party (*Appeal Brief, Page 7*).

In response, the examiner notes that claim 1 requires that the audio loopback path plays a telephone user's own voice back at an adjusted "loopback rate" at a rate selected "by the other party". In other words claim 1 recites that an audio loopback path plays back rate-adjusted speech to a user. Turning to Fig. 20 it can be seen that a loopback path (2012) of a first handset (A) is simply as it is described, it is just a communication path featuring no type of hardware to adjust a rate of speech. The

Art Unit: 2626

specification (*Page 25, Lines 14-25*) makes it clear it is a rate variable that adjusts the input speech of the first user and this rate controlling means is located at a second device. Independent claim 1 as well as claim 10 are completely silent as to this second device rate controlling means, which as was explained above and supported by the specification, serves to adjust the audio rate, not the loopback path. Thus, the loopback path in the first device is dependent upon the rate changer of the second device because the audio loopback path of the first device cannot make a rate adjustment, it can only play back adjusted audio. Furthermore, the goal of the applicants' invention is to place "an imposition on the calling party to cause that party to change his/her speaking rate" (*Appeal Brief, Page 8*). This goal could not be realized and the appellants' invention would not work if the second device adjustment means is not referenced/included in the claims. As such, this rate changer is critical and since it is missing from claims 1 and 10, the rejection of claims 1-16 under U.S.C. 112, second paragraph is proper.

Rejection of Claims 1-16 under 35 U.S.C. 103(a)

The appellants lastly address the rejection of claims 1-22 under 35 U.S.C. 103(a). Specifically, the appellants disagree with the rejection of claim 1 because they argue that in Okuda et al (*U.S. PG Publication: 2004/0179676*), a provided echo canceller would prevent the rate of the calling party's voice from being altered (*Appeal Brief, Page 8*). They continue to allege that this echo canceller contradicts the desired result of the claimed embodiments, namely an imposition on the calling party to cause

Art Unit: 2626

that party to change his/her speaking rate (*Appeal Brief, Page 8*). Lastly, the appellants argue that this structure in Okuda not only fails to teach or suggest the claimed embodiments, but also "teaches away from incorporating any concepts from other references that call for altering a calling party's voice that is fed back to the calling party through a speaker output" (*Appeal Brief, Page 8*).

In response to the appellants' first argument that Okuda's echo canceller would "prevent the rate of the calling party's voice from being altered", the examiner points to the specific description of this element in the Okuda reference (*Paragraph 0039*). In this passage, Okuda notes that echo cancellation does not necessarily completely cancel an echo of the user's voice as is argued by the appellants. Instead, Okuda notes that the echo canceller alternatively operates as a "means for *reducing* the sidetone". In such a case, the echo of the user's own voice is "hardly heard", but is still importantly "heard" by the user in such a way as to not interfere with their speaking over the telephone. Okuda's invention is illustrated in Fig. 3. In this drawing, a first caller/speaker voice is input into a voice speed converting unit (*Element 5 and Paragraphs 0039 and 0046*) and the rate-altered speech is sent to a second person over a telephone (*Element 3 and Paragraph 0044*). As is common with telephone systems, an echo or reflection of this transmitted, rate-altered voice is received at the first handset (*Paragraph 0046*) and processed by an echo canceller (*Element 6*). As was noted above, however, this echo canceller functions as an echo reducer which attenuates the reflection of the first caller's own rate-adjusted speech, but does not necessarily completely cancel it (*Paragraph*

Art Unit: 2626

0039). In this way, the user would still hear a lower volume version of their rate adjusted voice as is set forth in claim 1.

The only issue in the Okuda reference as it pertains to the claim is that the adjustment of the first caller's voice is set accomplished in their own device and not in the device of another caller. The secondary reference, Nejime et al (*U.S. Patent: 5,717,818*), however, overcomes this deficiency in Okuda. Nejime teaches a speech speed converter used in connection with a telephone handset (*Fig. 36; and Col. 31, Lines 9-16*). This speed converter allows a second speaker (*in the provided example, an aged person*) to adjust a first person's voice so that it can be "heard over the telephone slowly" (*Col. 31, Lines 12-22*). Nejime's system also allows this rate-adjusted first speaker's speech to be "fed back as a through voice [i.e., echo] to the speaker side as well" (*Col. 31, Lines 12-22*). As Okuda does not completely cancel this fed back or echo signal, as was pointed out above, it is proper to combine Okuda with Nejime's voice rate adjustment by a second user to better prevent communication difficulties experienced in speaking with an aged person (*Okuda, Col. 31, Lines 17-22*).

Accordingly, based on the above, Okuda does not completely cancel an echo of a speed-adjusted signal and can thus be combined with a secondary reference that feeds back an adjusted first voice modified at a second user's device. In other words, Okuda does not teach away from Nejime as the appellants appear to allege. Also, since the combination of Okuda and Nejime results in a first caller's voice that was altered at a second user's handset received at a first handset as a fed back echo, the prior art would also accomplish the claimed intended result of placing an imposition on

Art Unit: 2626

the first user to adjust the rate of their subsequent speech. In the applicant's specification (*Page 1*), it is noted that "it is known in speech communication research that a talking individual establishes a speaking rate *based on the hearing of his or her own speech* which conforms to this internal comfort speaking rate" and "by adjusting the feedback speech rate between what the speaker is saying and what the speaker hears himself saying, it is possible to psychologically coerce the speaker to change their speaking rate". Since Okuda in view of Nejime teaches a sidetone loopback that allows a user to hear a speed-adjusted version of their voice, it would inherently flow naturally from this structure that a user would be imposed to alter their speaking rate based on the aforementioned naturally occurring psychological effect. Thus, the appellants arguments directed towards claim 1 have been fully considered, but are not convincing.

The appellants traverse the art rejection of independent claims 10 and 17 and associated dependent claims 2-9, 11-16, and 18-22 for reasons similar to claim 1 (*Appeal Brief, Page 8*). In regards to such arguments, please see the response directed towards claim 1.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Art Unit: 2626

Respectfully submitted,

/James S. Wozniak/
Primary Examiner, Art Unit 2626

Conferees:

/James S. Wozniak/
Primary Examiner, Art Unit 2626

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626

/Talivaldis Ivars Smits/
Primary Examiner, Art Unit 2626